



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,421	11/20/2001	Michael L. Roche JR.	Vrex-0015USAAON00	2563

26665 7590 10/06/2004

REVEO, INC.  
3 WESTCHESTER PLAZA  
ELMSFORD, NY 10523

EXAMINER

ARNOLD, ADAM

ART UNIT	PAPER NUMBER
----------	--------------

2671

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/996,421

Applicant(s)

ROCHE, MICHAEL L.

Examiner

Adam Arnold

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The examiner acknowledges the receipt and entry of the applicant's amendment.

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geshwind, U.S. Patent No. 6,590,573, in view of Latham, U.S. Patent No. 5,719,598. Referring to claim 1, Geshwind discloses a method of stereoscopic image processing on a networked computer system (col. 2, line 4) comprising loading a first image (col. 2, line 5), loading a second image (col. 2, line 5), color matching the first and second image (col. 17, lines 4-5 and col. 17, lines 49-52), stereoscopically aligning the first and second images (col. 2, lines 31-33), reducing crosstalk (col. 22, line 23) and displaying a stereoscopic image of the first and second images (col. 2, line 33). Geshwind does not disclose aligning recursively through a return loop or reducing crosstalk between stereoscopically aligned images. Latham discloses performing antialiasing recursively to conserve time and bandwidth (col. 4, line 2 and abstract). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to align recursively through a control loop and to reduce crosstalk between stereoscopically aligned images. Regarding the former, one of ordinary skill in the art would have been motivated to do this, because this, in essence, is one of the features of digital processing—performing tasks over and over again,

Art Unit: 2671

thereby saving time and increasing performance. Regarding <sup>cross</sup>~~small~~ talk reduction, this technique would be useful in enhancing user visualization (see Geshwind, col. 3, line 30). 6a

Referring to claim 2, Geshwind discloses a stereoscopic metamorphosis process for converting one image into a stereoscopic image (col. 2, line 7) comprising retrieving and loading the 2D image (col. 4, lines 62-65), selecting and applying a depth metamorphosis processor (col. 2, lines 20-24), displaying the 2D image as a 3D image (col. 2, lines 63-65), said 3D image composed of a depth map, applying cross talk reduction algorithms (col. 22, line 23), modifying color (col. 19, line 5) and contrast (col. 19, line 31) attributes, and displaying the 3D image (col. 2, line 65). Geshwind does not disclose selecting and applying a depth metamorphosis processor, applying cross-talk reduction algorithms or processing depth iteratively. Latham discloses performing antialiasing recursively to conserve time and bandwidth (col. 4, line 2 and abstract). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to select and apply a depth metamorphosis processor iteratively. One of ordinary skill in the art would have been motivated to do this, because this, in essence, is one of the features of digital processing—performing tasks over and over again, thereby saving time and increasing performance.

### ***Response to Arguments***

3. Applicant's arguments filed May 10, 2004 have been fully considered but are unpersuasive. The applicant argues that there is no teaching in Geshwind to reduce crosstalk between the stereo aligned images. The examiner counters that there is a teaching of reducing crosstalk in Geshwind, and it would have been obvious to apply it to the stereo aligned images

Art Unit: 2671

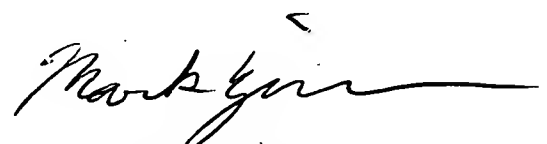
based on motivation found in Geshwind. Moreover, the examiner contends it would have been obvious to apply a depth metamorphosis processor iteratively on the image as shown in rejection 2 above.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam Arnold whose telephone number is 703 305 8413. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached on 703 305 9798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
MARK ZIMMERMAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600